CLAIMS:

1 A light-emitting diode comprising:
a chip capable of emitting visible light of a first wavelength,
a light-emitting surface, and
a phosphor layer which is provided on the light-emitting surface and which is capable of converting light of the first wavelength to visible light of a second wavelength, characterized in that the light-emitting surface comprises a sub-surface without the phosphor layer.

2. A diode as claimed in claim 1, characterized in that the size of the sub-surface is such that mixing the emitted light of the first and the second wavelength results in substantially white light.

3. A diode as claimed in claim 1 or 2, characterized in that the thickness of the phosphor layer is such that all the light of the first wavelength incident on the phosphor layer is converted to light of the second wavelength.

4. A diode as claimed in claim 1, 2 or 3, characterized in that the sub-surface without a phosphor layer, or the sub-surface on which the phosphor layer is provided, is distributed over a plurality of partial sub-surfaces.

5. A diode as claimed in claim 4, characterized in that the partial sub-surfaces form a pattern.

6. A diode as claimed in any one of the preceding claims, characterized in that the sub-surface without a phosphor layer is at least partly covered with a light-transmitting layer which is capable of spreading light incident on said sub-surface.

7 A lighting device comprising at least one light-emitting diode including:
a chip which is capable of emitting visible light of a first wavelength,

a light-emitting surface, and

a phosphor layer which is provided on the light-emitting surface and which is capable of converting light of the first wavelength to visible light of a second wavelength, characterized in that said light-emitting surface comprises a sub-surface without the phosphor layer.

8. A lighting device as claimed in claim 7, characterized in that the lighting unit further comprises optical elements for mixing the emitted light of the first and the second wavelength.

9. A method of manufacturing a light-emitting diode, wherein a chip which is capable of emitting visible light of a first wavelength is at least partly surrounded by a light-emitting surface, and a phosphor layer is provided on the light-emitting surface, which phosphor layer is capable of converting light of the first wavelength to visible light of a second wavelength, characterized in that the phosphor layer is removed from, or not provided on, a sub-surface of the light-emitting surface.

10. A method as claimed in claim 9, characterized in that the phosphor layer is provided on the diode by means of screen printing.